

Please amend Claims 1, 2, 4, 5, 9, 10, 12-15, 20, 41, 44, 46, 87 and 88.

The following claims are being amended and marked-up amended claims are attached to this Amendment as Appendix A showing all changes relative to the previous version of the claims. The amended claims in clean form are as follows:

1. (Amended) A noise elimination device, comprising:  
a housing provided with coaxial connectors on both ends;  
and  
a noise elimination circuit arranged inside the housing;  
wherein a ground conductor thickness of a coupling portion coupling the noise elimination circuit with the coaxial connectors is at least twice a skin depth due to a skin effect at a transmission signal frequency.

2. (Amended) The noise elimination device according to Claim 1, wherein the noise elimination circuit includes a coil made by winding a coaxial cable around at least one of an open magnetic core, a closed magnetic core, or both an open magnetic core and a closed magnetic core connected in series.

4. (Amended) A method for installing a noise elimination device, the noise elimination device comprising:

a housing provided with coaxial connectors on both ends; a noise elimination circuit arranged inside the housing;

wherein a ground conductor thickness of a coupling portion coupling the noise elimination circuit with the coaxial connectors is at least twice a skin depth due to the skin effect at a transmission signal frequency;

wherein the noise elimination circuit includes a coil made by winding a coaxial cable around at least one of an open magnetic core, a closed magnetic core, or both an open magnetic core and a closed magnetic core connected in series; and

wherein the noise elimination device further includes a highpass filter arranged in series with the coil;

the method comprising:

placing the coil closer to a noise generating side than the highpass filter when installing the noise elimination device in a signal transmission line including a coaxial cable.

5. (Amended) The noise elimination device according to Claim 1, wherein the noise elimination circuit is made by coupling core conductors of the coaxial connectors via a first coil wound around a ferrite core, coupling outer conductors of the coaxial connectors via a second coil wound around the ferrite core, inserting a capacitor on at least one of the two sides of both the first and second coil, providing a first choke coil in parallel with the first coil and the capacitor

provided on the side of the first coil, and providing a second choke coil in parallel with the second coil and the capacitor provided on the side of the second coil.

9. (Twice Amended) The noise elimination device according to Claim 1, wherein the coaxial connectors are formed each in independent housings, the independent housings are connected with a coaxial cable, and a coil of said noise elimination circuit is provided in one of the independent housings.

10. (Amended) The noise elimination device according to Claim 6, wherein the plug connector and the jack connector are formed each in independent housing, the independent housings are connected with a coaxial cable, and a coil is provided in one of the independent housings.

12. (Twice Amended) The noise elimination device according to Claim 34, wherein the first coil and the second coil are made by serially winding around two ferrite cores, wherein one ferrite core is a closed magnetic ferrite core and the other ferrite core is an open magnetic ferrite core.

13. (Twice Amended) The noise elimination device according to Claim 36, wherein the first coil and the second

coil are made by serially winding around two ferrite cores, wherein one ferrite core is a closed magnetic ferrite core and the other ferrite core is an open magnetic ferrite core.

14. (Amended) The noise elimination device according to Claim 91, wherein the first coil and the second coil are made by serially winding around two ferrite cores, wherein one ferrite core is a closed magnetic ferrite core and the other ferrite core is an open magnetic ferrite core.

15. (Twice Amended) The noise elimination device according to Claim 88, wherein the first coil and the second coil are made by serially winding around two ferrite cores, wherein one ferrite core is a closed magnetic ferrite core and the other ferrite core is an open magnetic ferrite core.

20. (Amended) The noise elimination device according to Claim 91, wherein a conductor of the first coil is made of a center conductor and a conductor of the second coil is made of an outer conductor covering the center conductor, so that the coil conductors are arranged as a coaxial cable.

41. (Twice Amended) The noise elimination device according to Claim 2 further comprising a transformer connected in series to the coil.

44. (Amended) The noise elimination device according to Claim 90 further comprising a transformer connected in series to the coil.

46. (Amended) The noise elimination device according to Claim 10 comprises a transformer connected in series to the coil.

37. (Amended) The noise elimination device according to Claim 3, wherein the coaxial connectors are formed each in independent housings, the independent housings are connected with a coaxial cable, and the coil is provided in one of the independent housings.

38. (Amended) The noise elimination device according to Claim 5, wherein the coaxial connectors are formed each in independent housings, the independent housings are connected with a coaxial cable, and the coil is provided in one of the independent housings.

Please add the following new Claims.